

**Descriptions of two new Nearctic species of the genus *Hydrellia* reared from Pond-weed (Diptera: Ephydriidae).**

By EZRA T. CRESSON, JR.

Among some material received from Mr. C. O. Berg of the University of Michigan reared from several species of pond-weed of the genus *Potamogeton*, I found the following apparently undescribed species. Mr. Berg has kindly allowed the types to be placed in the Collection of The Academy of Natural Sciences of Philadelphia.

***Hydrellia luctuosa* new species.**

Similar to *H. caliginosa* Cresson, 1936, but entirely black except the halteres, and without any cinereous vestiture; also is considerably smaller.

Antennae, palpi and tarsi, black; halteres pale yellow.

Opaque, except scutellum and abdomen somewhat shining. Vestiture dark grayish in certain aspects, never cinereous; lunule slighter lighter.

Ocellars distinctly stronger than proclinate orbital. Anterior dorsocentral well developed and about as far removed from postsutural one as their distance from each other. Genital segment small, inconspicuous. Anterior series of three to four strong setae on mid femur, particularly in the males, and the mid tibiae of that sex somewhat thickened. Costa III about as long as II.

Length, 1.5 mm.

Type.—Male; Bessey Creek, Cheboygan County, MICHIGAN; August 14, 1941; (C. O. Berg; from *Potamogeton zosteriformis*); [A. N. S. P., no. 6620].

*Paratypes*.—5 ♀; topotypical, with same data. 1 ♂; with same data except from *P. richardsoni*. 1 ♀; with same data except from *P. natans*. 1 ♀; Douglas Lake, Cheboygan County, VII 3, 1941; from *P. richardsoni*. 2 ♂; Nigger Creek, Cheboygan County, VIII 21, 1941, from *P. tenuifolius*.

***Hydrellia ascita* new species.**

Very similar to *H. bilobifera* Cresson, 1936, but appearing different in having the mesonotum, including humeri and notopleura uniformly dark, and the tibiae mostly black.

Pale, yellow to orange: ground of face, apex of antenna III, palpi, apex of fore coxa, extremity of femora, base and apex of tibiae and base of tarsi. Halteres whitish. Wings clear with black veins.

Vestiture of dorsal surfaces brownish; lunule, pleura and ventral surfaces more cinereous. Face sericeous, niveous to golden. Mesonotum, humeri and notopleura dark, contrasting with the lighter pleura.

Frons transverse. Face about one-fifth width of head; orbits strongly flaring to moderately broad cheeks. Antesutural dorsocentral well developed, but shorter and rather approximate to the postsutural one; no second postsutural dorsocentral noticeable. Setation of legs inconspicuous. Segment V of male with distinct, bilobed, caudal margin. Costa II not much longer than III.

Length, 1.5 mm.

*Type*.—Male; Nigger Creek, Cheboygan County, MICHIGAN; August 21, 1941; (C. O. Berg; from *Potamogeton tenuifolius*); [A. N. S. P., no. 6621].

*Paratypes*.—4 ♂, 11 ♀; topotypical, with same data.

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### **The Terms Instinct and Intelligence as Used in Discussions of Insect Behavior.**

By PHIL RAU, Kirkwood, Missouri.

I have a predilection for the good old-fashioned word instinct, and propose to use it in preference to any one of the many substitutes invented to take its place. It is true many sins have been committed in the name of instinct, but these have been by scholasticists, lay writers and philosophers, and not by students of comparative psychology. The misuse of the word has not been sufficiently great, however, to warrant its disuse in studies of insect behavior. In my opinion, nothing is to be gained by substituting for it such terms as "innate behavior", "inborn capacities", "inborn powers", "stereotyped behavior", "automatic acts", "spontaneity", "inherited propensity", "mechanical automata", "automatized reasoning", "unlearned acts", "motor memory", "muscle memory", "species memory", or what not. Such terms seem ambiguous, are con-